

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Federal Foam Technologies

#### Northwest Wisconsin Manufacturing Outreach Center

#### Lean Manufacturing Significantly Increases Flexibility and On-Time Delivery

##### Client Profile:

Federal Foam Technologies (FFT) is located in New Richmond, Wisconsin, with 125 employees and has been in business for 52 years. FFT is a division of Federal International which is headquartered in St. Louis, Missouri. A variety of products that incorporate foam are produced at the plant. These products are used to cushion, protect, reduce noise and vibration, filter and/or insulate. Demand for the products has been strong; however, competition is also increasing.

##### Situation:

During the last months of 2003, one of FFT's major customers strongly encouraged its suppliers to adopt Lean Manufacturing principles. The customer wanted quality parts delivered on time and in the batch size it needed that day. Since this order size could vary from day-to-day, its production system had to become more flexible and responsive to significant variations in batch size. FFT at New Richmond was not ready to meet these requirements, and their customer recommended that they contact the Northwest Wisconsin Manufacturing Outreach Center (NWMOC) at UW-Stout, a NIST MEP network affiliate, for technical assistance.

##### Solution:

After visiting the FFT plant and discussing the need with company representatives, NWMOC Project Managers planned and conducted a Principles of Lean Manufacturing Workshop for employees from the Final Assembly production and supporting areas. A week later the Project Managers facilitated a Value Stream Mapping Event in which these employees developed current and future state Value Stream Maps (VSM) and a Value Stream Plan for the Panel Trim production process. Implementation of the future state map was carried out in a Cellular Flow Implementation project in which an employee team, with the assistance of the NWMOC Project Managers, designed a new manufacturing layout for producing the Panel Trim. The future state VSM was used to determine the work sequence, balance the process, and modify the facility layout. The cell was designed in two days and three days were needed to relocate equipment. On the sixth day the cell "went live" and operated effectively. The production team continues to monitor and improve the performance of the cell. NWMOC Project Managers continue to coach the team.

##### Results:

- \* Increased sales.
- \* Decreased labor significantly.
- \* Reduced Inventory by \$48,000.
- \* Reduced lead time by 47 percent.
- \* Reduced floor space by 1000 square feet.

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

- \* Reduced expediting costs to zero.
- \* Approach is being applied to other production areas.

**Testimonial:**

"On-time delivery of product has been significantly improved. The assistance of the NWMOC staff was very helpful. We could not have done the project without them. Their input changed our view of manufacturing."

Dan Sikorski, Production Manager